Section of General Practice

President L Dulake MB

Meeting November 18 1964

Obesity [*Abridged*]

Abstract: Dr Philip Hopkins defines obesity and describes its incidence in his general practice. He stresses the importance of dealing with underlying psychological factors in the treatment of the condition.

Dr A A Lewis discusses hormonal influences and advocates a high protein diet as being an acceptable means of achieving weight reduction.

Professor John Yudkin shows that a low protein diet is impracticable, and stresses the importance of physical activity in the treatment of obesity. He advocates a low carbohydrate diet with unrestricted fat and protein.

Dr Philip Hopkins (*London*)

Obesity in General Practice

I define obesity as a condition in which there is an excessive amount of body fat. As McMullan (1959) has written, the complicated tables of standard weight are not of much value, although most authorities agree that if an individual is more than 10% over the average weight for his age, height and sex then he may be said to be obese. But we must remember that the well-developed muscular individual may be overweight though not obese.

A formula I have found useful for estimating the average weight is to take 115 lb as the average weight for a 20-year-old woman 5 ft tall; 3 lb should be added for each inch over 5 ft in height and 4 lb for each inch over 5 ft 5 in. An extra 1 lb should be added for each two years over the age of 20. Thus, the average weight of a woman of 36, 5 ft 7 in. tall, would be 115 + 15 + 8 + 8 = 146 lb. For a 20-year-old man measuring 5 ft 2 in. in height the average weight is 122 lb. For each extra inch up to 5 ft 11 in. an addition of 4 lb should be made, and a further 5 lb for each additional inch above this height. For each two years over the age of 20 a further 1 lb should be added, or an extra 2 lb for each two years over 20 if over 5 ft 11 in. in height.

Incidence

Recently I collected the notes of 115 consecutive patients, and found that, in my estimation, obesity was of importance in 20 of them; this gave an incidence of 17·4%, which is very near to the 18% incidence given by McMullan (1959).

The incidence of obesity is probably much the same in this country and all over Europe, and in other well-developed countries, as it is in the United States.

The importance of obesity, apart from the unseemly appearance, lies chiefly in the fact that it is so frequently associated with serious disease processes. According to the Metropolitan Life Insurance Company (1951) the death rate from diabetes is 375% higher in the obese than in others; for obese men with gallstones the death rate is 249% higher than for others, and 147% higher in obese women. Opinions differ with regard to the effect of obesity on cardiovascular disease. The death rate from the chief cardiovascular diseases is 149% more for obese men and 177% more for obese women. Even fatal accidents are 111% more for men and 135% more for women who are obese.

Ætiology and Diagnosis

There is a considerable and confusing literature on the possible ætiology of obesity, although there is agreement about one group of obese patients – those in whom there is a lesion of the mid-brain or hypothalamus (French 1960). However, it is not exactly common experience to see patients with any of these lesions as an explanation for their obesity.

Animal experiments confirm that bilateral destruction of the paraventricular nuclei of the hypothalamus gives rise to the development of an abnormal appetite, and it is now generally agreed that the emotional state also has a profound effect on the hypothalamus, with the result that patients develop an uncontrollable desire to

Table 1
Reason for consultation when obesity first noted

Sex	First seen Year	Age	Initial height (ft in.)	Initial weight (lb)	Loss (L) or gain (G) by 1964	Reason for consultation
F	1957	8	4 6	90	L	'Getting fat'
F	1952	9	5 0	165	ISQ	Routine visit for epilepsy
F	1958	21	5 6	155	L	Ante-natal examination
F	1959	22	5 3	129	L	Depression about size of bust
F	1964	29	5 1½	122½	ISQ	Depression and fatigue
M	1951	40	5 4½	213	L	Breathlessness. Pain in chest
F	1957	44	5 5	190	ISQ	Headaches and depression
M	1952	45	5 10	200	L	Breathlessness and chronic cough and impotence
M	1957	47	5 10	214	L	Breathlessness. 'Getting fat'
F	1950	50	5 7	192	L	Anxiety and headaches with breathlessness
F	1964	51	5 4½	154	L	'Swelling of eyes'
F	1957	52	5 4½	159	ISQ	Multiple symptoms including painful knees and depression
M	1959	55	5 10	185	L	Anxiety about cough
M	1953	58	5 9½	216	G	Cough, breathlessness and dizziness
F	1958	59	5 8	161	L	Paralysis of arm and leg
M	1961	60	5 9½	212	L	Gout and painful neck
F	1964	63	5 6	227	ISQ	Ulcer on leg
F	1960	63	5 3½	155	L	Pain in back and knees, also insomnia and depression
F	1960	65	5 2	117	ISQ	Pain in chest and breathlessness
M	1962	79	5 7	182	G	Abdominal pain, cough and breathlessness

eat, although some actually say that they are not hungry.

There are other rare causes of obesity and Simpson (1959) describes a family in which three of the six children have genetic pituitary adiposity.

Clinical Study

Table 1 shows, in order of ascending age, details of 20 of my patients, whose obesity I thought required attention as it had some bearing on their condition as well as constituting a threat to their future health.

In discussing the treatment of this group of patients I must emphasize that in only 2 of them was there an actual complaint of their overweight – in the others their obesity was a clinical observation, as was the accompanying depression in most of them.

Treatment

The treatment of patients with obesity must start with complete examination of all aspects of the patient and his total situation, so that a proper assessment may be made of the various factors involved. Careful history-taking and discussion of the life situation at the time the weight-gain started, will reveal the psychological factors. Once this is achieved it is surprising how much easier it is for these patients to follow a simple diet. In the first place, I always tell patients what they *may* eat rather than what they should not eat, since this is less likely to have a further depressing effect on people who are already depressed. But diet alone is not sufficient, and I have seen patients suffering from underlying emotional disturbance who have been made worse by enforced rigid diets which they are genuinely unable to keep. We must be very careful about believing that 'fat people are jolly'. So often this external appearance of being jolly covers a considerable depression. There is a great deal in the literature describing the possible reasons why some people eat more than they need, particularly when they are unhappy. Hilde Bruch (1939, 1943, 1952) in some excellent studies on obesity in childhood, describes the mother's attitude to the child and the threats to the child's security. So often these obese children are unwanted or deprived and she says that: 'Food acquires an exaggerated significance. It stands for love, security, satisfaction.'

Drugs in my view are not of any great help unless one chooses the appropriate sedative for the over-anxious person or, perhaps, a stimulant for the depressed patient; the drug manufacturers have shown their understanding of the problem, but I very seldom find it necessary to prescribe the drugs usually advised for the treatment of obesity. Much safer for depressive states are drugs such as imipramine, provided that their use is accompanied by psychotherapy, appropriate to the underlying psychopathology.

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